

## Research article

# Knowledge of Nurses in the Intensive Care Unit About Pain Management

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## Abstract.

Pain in patients in the intensive care unit (ICU) is a substantial problem in patients with critical conditions. Proper assessment and management of pain is a key indicator of care quality and patient satisfaction, regardless of the health care setting. Poor treatment of pain can lead to serious complications, so knowledge is needed by nurses to support the implementation of effective pain management. The purpose of this study was to examine nurses' knowledge of the implementation of pain management. This was a quantitative descriptive study with a sample of 84 nurses serving in the ICU. The data were collected using the Knowledge and Attitudes Survey Regarding Pain questionnaire. Univariate analyses were carried out by analyzing the frequency distribution and descriptive statistics. The results showed that almost all respondents (89.3%) had poor knowledge and 10.7% had sufficient knowledge. Nurses need to have good knowledge and skills in the implementation of pain management; therefore, it is necessary to provide training and education to nurses.

**Keywords:** intensive care unit, knowledge, pain management, nurse

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## 1. Introduction

Pain is one of the things to note because the pain becomes a real problem in patients with critical conditions [1]. Pain in patients in the ICU is one thing that needs to be considered because pain is a real problem in patients with critical conditions [1]. In addition to pain assessments based on the patient's self-report, non-verbal and behavioral expressions become very important in the implementation of pain management (ref). Non-self-report assessment strategies for assessing pain include facial expressions (e.g., grimacing), behavioral observations (e.g., guarding and body movements), and physiological monitoring (e.g., vital signs) [2].

Patients in the ICU have unique characteristics that present significant challenges for critical care teams. Complex patient experiences and life-threatening conditions are often associated with discomfort and pain [3]

Nurses play an important role in implementing pain management, pharmacological interventions being the most commonly performed strategies collaboratively with other medical teams, but the implementation of nursing to pain also includes physical,

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cognitive, and behavioral actions. In addition to giving drugs or providing alternative therapies, in pain management it is important to take measurements of the patient's response to the therapy that has been given.

In addition to the provision of pharmacological therapy non-pharmacological therapy becomes the thing that needs to be done by nurses in critical care, basic non-pharmacological interventions that can be done include environmental modification. Excessive noise and light in the ICU can disrupt sleep and increase anxiety and anxiety that is likely to cause pain and discomfort. Other non-pharmacological actions that can be done include distraction, relaxation techniques, touch, and massage, these actions will help divert patients from the source of pain to more pleasant things [4]. Poor treatment of pain can lead to serious complications, including neurohumoral changes, neuronal remodeling, and prolonged psychological stress that can harm critical patients [5].

Obstacles that affect the implementation of pain management include the condition of the hospital environment, the completeness of medical equipment, and the condition of the severity of the patient's illness [6]. In the implementation of pain management nurses often act as mediators between doctors and patients as well as the main observers of the patient's pain and discomfort conditions. Critical patients are often unable to communicate effectively so that in the pain assessment process nurses need to conduct pain assessments more specifically and not only rely on patient self-reports, but nurses still see the patient's condition objectively both from hemodynamic conditions and behavioral changes that arise. The results of research related to internal factors that affect the implementation of pain management mention that most nurses (89%) choose not to use pain assessment tools for patients who are unable to communicate and nurses are not very familiar with pain assessment and assessment guidelines [2].

Knowledge becomes an internal factor in the implementation of pain management, research conducted in Africa related to pain management of ICU nurses is found that nurses have less knowledge and attitudes than nurses in regular room care [7] and another study said only one-third of ICU nurses showed knowledge of moderate pain before educational intervention consisting of one-hour video recordings on pain management and pain management modules. Self-taught about pain control [8]. Cognitive tests of nurses' knowledge and surveys of nurses' attitudes about pain revealed significant deficiencies in pain assessment-related knowledge, with average scores of 74%-81% [6]. Therefore, knowledge become one of the internal factors that become obstacles experienced by nurses in the implementation of pain management.

## 2. Methods

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### 2.1. Study design

This study uses univariate analysis by analyzing the distribution and descriptive statistics to see the description of the frequency distribution and percentage.

### 2.2. Sample

The number of samples in this study amounted to 86 nurses who work in the ICU

### 2.3. Instruments

The data was collected using the Knowledge and Attitudes Survey Regarding Pain questionnaire

### 2.4. Data collection procedure

This research has been tested ethically and has carried out the licensing process for the implementation of data collection at Hasan Sadikin Hospital. Data collection was carried out for one month by distributing questionnaires to nurses who served in the ICU and researchers accompanied respondents during the questionnaire process

## 3. Results

TABLE 1: Frequency Distribution Of Knowledge Factor Overview Of Pain Management Implementation (n=84).

Category	Frequency	%
Good	0	0,0
Enough	9	10,7
Less	75	89,3
<b>Total</b>	<b>84</b>	<b>100</b>

Table 1. The above is a recapitulation of respondents' responses regarding the picture of nurse knowledge factors in intensive rooms related to the implementation of pain

management. From the table, it is known that almost all of the respondents had less good knowledge as much as 89.3%.

## 4. Discussion

The results of the study are in Table 1. Almost all of the respondents had poor knowledge, which was 89.3%. The results of the study in Table 1 related to knowledge showed three items of questions related to pain management knowledge that had the lowest score including actions regarding the timing of pharma therapy, as well as pain assessment in children. This may occur due to a lack of understanding of nurses related to the provision of pharmacological therapy to patients. The workload may be one of the obstacles that affect nurses so that they do not have time to learn to understand the process of giving drugs to patients.

Knowledge related to the pharmacology of various drugs and the status of patient physiology is very important, nurses should have good knowledge regarding the schedule of drug administration because errors in the administration of drug schedules will adversely affect the patient. This condition shows that the relationship between knowledge and the implementation of pain management, especially in intensive areas. Following the condition of the nurse's knowledge regarding the implementation of pain management,

This research is also in line with research conducted by Rose, et al (2012) which states that knowledge is one of the obstacles experienced by nurses in the pain assessment and management process so that it has a great relationship with the implementation of pain management. Factors that become obstacles usually occur when the implementation process starts from the assessment, namely related to the implementation of pain assessment that must be done based on behavior; indicators of pain behavior and physiology; awareness of local and international guidelines on assessment and management of pain by EBP, pain-related knowledge and communication practices when pain management. The implementation of pain management in the ICU becomes an important thing to do correctly, health workers in the ICU, especially nurses need greater knowledge about the importance of pain assessment. An important part of pain management in hospitals is an ongoing evaluation of treatment outcomes to prevent severe pain. The complexity of pain management requires commitment, time, and knowledge from healthcare staff. A team of supportive professionals in pain management is needed to reduce the unnecessary consequences of pain in patients admitted to the ICU [9]. Education and training are required by nurses to support the

implementation of effective pain management, inadequate training and preparation will affect effectiveness in the management of pain management, education becomes effective to remove obstacles that affect pain evaluation and management [10]. Education and training are beneficial in the following: the challenges of making decisions in choosing therapies to sustain life, barriers to providing good palliative care, factors that support good living care, and specific guidelines for the selection of life-sustaining therapies.

Variability of nurse levels in intensive spaces becomes one of the obstacles in the implementation of pain management, the curriculum related to pain management given to nurses with diploma education levels is different from the curriculum given to nurses with undergraduate or master's degrees. Research conducted by Abazari et al., related to pain management in pediatric nurses mentions that the lack of basic training is identified as one of the main reasons nurses carry out inadequate pain management [11].

The results also mentioned that the majority of the last educated respondents D3 as much as 57.1% and almost all of the respondents had never attended pain management training as much as 78.6%. This is following research conducted by Fang, et al, the school level of education and training of pain management previously had a major effect on the implementation of pain management [12].

## 5. Conclusions

Nurses need to have good knowledge and skills in the implementation of pain management, this aims to increase self-confidence to be able to act as advocates for patients. This knowledge will be gained through education or training conducted periodically related to pain management to improve the knowledge and skills of nurses. Therefore, it is necessary to provide training and education to nurses.

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